

IN THE CLAIMS:

1 1-20. (Canceled)

1 21. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line,

5 and further comprising a pressing arrangement that fixes the LED with pressure
6 between a first pressing face arranged at the first housing element side and a second pressing
7 face arranged at the second housing element side accompanied by joining the first and the second
8 housing elements and a positioning arrangement that positions the LED so as to align an optical
9 axis of the LED with the predetermined axial line accompanied by joining the first and the
10 second housing elements, wherein the LED in an elementary substance can flow electrical
11 current not lower than 200mA through 300mA in a stationary state.

1 22. (New) The light irradiating unit according to Claim 21, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 23. (New) The light irradiating unit according to Claim 22, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 24. (New) The light irradiating unit according to Claim 21, wherein the heat
2 dissipating portion is in a shape of a fin arranged on a periphery portion of the housing.

1 25. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line,

5 and further comprising a pressing arrangement that fixes the LED with pressure
6 between a first pressing face arranged at the first housing element side and a second pressing
7 face arranged at the second housing element side accompanied by joining the first and the second
8 housing elements and a positioning arrangement that positions the LED so as to align an optical
9 axis of the LED with the predetermined axial line accompanied by joining the first and the
10 second housing elements, wherein an elastic member is arranged between at least one of the first
11 and the second pressing faces and the LED.

1 26. (New) The light irradiating unit according to Claim 25, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 27. (New) The light irradiating unit according to Claim 26, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 28. (New) The light irradiating unit according to Claim 25, wherein the heat
2 dissipating portion is in a shape of a fin arranged on a periphery portion of the housing.

1 29. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line,

5 and further comprising a pressing arrangement that fixes the LED with pressure
6 between a first pressing face arranged at the first housing element side and a second pressing
7 face arranged at the second housing element side accompanied by joining the first and the second
8 housing elements and a positioning arrangement that positions the LED so as to align an optical
9 axis of the LED with the predetermined axial line accompanied by joining the first and the
10 second housing elements, wherein the positioning arrangement makes use of a ring portion
11 mounted on the housing and positions the LED by inserting the LED into a center through hole
12 of the ring portion without a slack accompanied by joining the first housing element to the
13 second housing element.

1 30. (New) The light irradiating unit according to Claim 29, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 31. (New) The light irradiating unit according to Claim 30, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 32. (New) The light irradiating unit according to Claim 29, wherein the heat
2 dissipating portion is in a shape of a fin arranged on a periphery portion of the housing.

1 33. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line,

5 and further comprising a pressing arrangement that fixes the LED with pressure
6 between a first pressing face arranged at the first housing element side and a second pressing
7 face arranged at the second housing element side accompanied by joining the first and the second
8 housing elements and a positioning arrangement that positions the LED so as to align an optical
9 axis of the LED with the predetermined axial line accompanied by joining the first and the
10 second housing elements, wherein the positioning arrangement makes use of a ring portion
11 mounted on the housing and positions the LED by inserting the LED into a center through hole
12 of the ring portion without a slack accompanied by joining the first housing element to the
13 second housing element, and an inner face of the ring portion is a mirror finished conic concave
14 face and the ring portion has a function to guide light forward.

1 34. (New) The light irradiating unit according to Claim 33, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 35. (New) The light irradiating unit according to Claim 34, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 36. (New) The light irradiating unit according to Claim 33, wherein the heat
2 dissipating portion is in a shape of a fin arranged on a periphery portion of the housing.

1 37. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line, and further comprising a pressing arrangement that fixes the LED with
5 pressure between a first pressing face arranged at the first housing element side and a second
6 pressing face arranged at the second housing element side accompanied by joining the first and
7 the second housing elements and a positioning arrangement that positions the LED so as to align
8 an optical axis of the LED with the predetermined axial line accompanied by joining the first and
9 the second housing elements, wherein the LED in an elementary substance can flow electrical
10 current not lower than 200mA through 300mA in a stationary state, and the second housing
11 element comprises a wall and a projecting body projecting from the wall along the axial line,
12 the LED is mounted on an annular substrate, and the second pressing face set at a distal end of

13 the projecting body that penetrates a center hole of the substrate is tightly attached to a bottom
14 face of the LED directly or through a heat conduction member.

1 38. (New) The light irradiating unit according to Claim 37, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 39. (New) The light irradiating unit according to Claim 38, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 40. (New) The light irradiating unit according to Claim 37, wherein the heat
2 dissipating portion is in a shape of a fin arranged on periphery portion of the housing.

1 41. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line, and further comprising a pressing arrangement that fixes the LED with
5 pressure between a first pressing face arranged at the first housing element side and a second
6 pressing face arranged at the second housing element side accompanied by joining the first and
7 the second housing elements and a positioning arrangement that positions the LED so as to align
8 an optical axis of the LED with the predetermined axial line accompanied by joining the first and
9 the second housing elements, wherein the second housing element comprises a wall and projecting
10 a body projecting from the wall along the axial line, the LED is mounted on an annular substrate
11 and the second pressing face set at a distal end of the projecting body that penetrates a center
12 hole of the substrate is tightly attached to a bottom face of the LED directly or through a heat
13 conduction member, and an elastic member is arranged between at least one of the first and the
14 second pressing faces and the LED.

1 42. (New) The light irradiating unit according to Claim 41, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 43. (New) The light irradiating unit according to Claim 42, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 44. (New) The light irradiating unit according to Claim 41, wherein the heat
2 dissipating portion is in a shape of a fin arranged on periphery portion of the housing.

1 45. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line, further comprising a pressing arrangement that fixes the LED with
5 pressure between a first pressing face arranged at the first housing element side and a second
6 pressing face arranged at the second housing element side accompanied by joining the first and
7 the second housing elements, a positioning arrangement that positions the LED so as to align an
8 optical axis of the LED with the predetermined axial line accompanied by joining the first and
9 the second housing elements and a lens mechanism that is incorporated into the housing, wherein
10 the LED in an elementary substance can flow electrical current not lower than 200mA through
11 300mA in a stationary state, and the positioning arrangement positions the LED by inserting the
12 LED without a slack into a concave portion arranged on a lens constituting the lens mechanism.

1 46. (New) The light irradiating unit according to Claim 45, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 47. (New) The light irradiating unit according to Claim 46, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 48. (New) The light irradiating unit according to Claim 45, wherein the heat
2 dissipating portion is in a shape of a fin arranged on periphery portion of the housing.

1 49. (New) A light irradiating unit comprising an LED and a housing into which the
2 LED is incorporated and which has a heat dissipating portion wherein the housing has a first
3 housing element and a second housing element each of which is joined serially along a
4 predetermined axial line, further comprising a pressing arrangement that fixes the LED with
5 pressure between a first pressing face arranged at the first housing element side and a second
6 pressing face arranged at the second housing element side accompanied by joining the first and
7 the second housing elements, a positioning arrangement that positions the LED so as to align an
8 optical axis of the LED with the predetermined axial line accompanied by joining the first and
9 the second housing elements and a lens mechanism that is incorporated into the housing, wherein
10 the positioning arrangement positions the LED by inserting the LED without a slack into a
11 concave portion arranged on a lens constituting the lens mechanism, and an elastic member is
12 arranged between at least one of the first and the second pressing faces and the LED.

1 50. (New) The light irradiating unit according to Claim 49, wherein the light
2 irradiating unit further comprises a lens mechanism that is incorporated into the housing and is
3 so arranged that the light irradiated from the LED is focused on a light focusing portion arranged
4 at a predetermined portion in a size of a predetermined radius through the lens mechanism.

1 51. (New) The light irradiating unit according to Claim 50, wherein the lens
2 mechanism comprises a first lens that makes the light irradiated from the LED generally parallel
3 and a second lens that focuses the light from the first lens into the light focusing portion.

1 52. (New) The light irradiating unit according to Claim 49, wherein the heat
2 dissipating portion is in a shape of a fin arranged on periphery portion of the housing.